WHAT IS CLAIMED IS:

1. A method for enabling communication between a first network device that communicates using a first address format and a second network device that communicates using a second address format, comprising:

receiving a frame from the first network device directed toward the second network device;

determining whether one address in the second address format is available to communicate with the second network device; and

defining a correspondence between the first network device address in the first address format and the determined address in the second address format if one address in the second address format is available, wherein the determined address is used to represent the first network device to the second network device.

2. The method of claim 1, wherein the first network device uses an address of the second network device in the first address format to communicate with the second network device, wherein the received frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively, further comprising:

setting the first network device address indicated in the frame to the defined corresponding address in the second address format for the first network device;

setting the second network device address indicated in the frame to a second network device address in the second address format; and

transmitting the frame including the first and second network device addresses in the second address format to the second network device.

3. The method of claim 2, wherein setting the second network device address to the address in the second address format comprises transforming address bits in the second network device address in the first address format included in the received frame.

4. The method of claim 3, wherein the step of transforming the address bits to the second address format comprises zeroing out bits in the second network device address in the first address format.

5. The method of claim 2, wherein the received frame includes an error redundancy code to check data integrity of the frame, further comprising:

recalculating the error redundancy code for the frame including the first and second network device addresses in the second address format; and

inserting the recalculated error redundancy code into the frame, wherein the frame including the recalculated error redundancy code is transmitted to the second network device.

6. The method of claim 2, further comprising:

receiving a response frame from the second network device in response to the transmitted frame, wherein the response frame identifies the second network device as the source and the first network device as the destination of the response frame, wherein the first and second network device addresses are in the second address format in the response frame;

setting the second network device address indicated as the source in the response frame to the registered address of the second network device in the first address format;

setting the first network device address indicated as the destination in the response frame to the address in the first address format defined as corresponding to the address in the second address format for the first network device; and

transmitting the response frame including the first and second network device addresses in the first address format to the first network device.

7. The method of claim 6, wherein the second network device is a member of a group of network devices that use the second address format to communicate, wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices, and wherein a same set of bits is used in the registered addresses of the network devices that are members of the group of network devices to identify the network devices as members of the group.

8. The method of claim 1, wherein the second network device is a member of a group of network devices that use the second address format to communicate, and wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices.

9. The method of claim 8, wherein correspondences are defined between multiple network device addresses in the first address format and determined multiple network device addresses in the second address format, wherein the determined addresses in the second address format are used to represent the multiple network devices to the group of network devices.

10. The method of claim 9, further comprising:

performing an initialization of the group of network devices; and

invalidating the defined correspondences of the multiple network device addresses in the first address format to the second address format.

11. The method of claim 9, wherein the group of network devices comprises an arbitrated loop attached to a switch, and wherein the first network device is capable of communicating with one port on the switch.

12. The method of claim 11, wherein the network devices and switch communicate using the Fibre Channel protocol and wherein the arbitrated loop comprises a private arbitrated loop.

13. The method of claim 11, wherein the switch includes a port to which the arbitrated loop is connected, wherein the port registers the addresses of the first and second network devices, receives the frame from the first network device, determines whether one address in the second address format is available, and defines the correspondence.

14. The method of claim 1, wherein the first network device transmits the frame to discover service parameters from the second network device to enable communication therebetween.

15. The method of claim 14, wherein the network devices communicate using the Fibre Channel protocol and wherein the first network device transmits the frame as part of a Fibre Channel PLOGI operation.

16. The method of claim 1, wherein after defining the correspondence of the first network device address in the first address format to one address in the second address format, performing:

receiving a subsequent frame from the first network device, wherein the subsequent frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively;

determining the first network device address in the second address format corresponding to the address in the first address format in the subsequent frame according to the defined correspondence;

setting the first network device address indicated in the subsequent frame to the corresponding first network device address in the second address format;

setting the second network device address indicated in the subsequent frame to a second network device address in the second address format; and

transmitting the subsequent frame including the first and second network device addresses in the second address format to the destination network device.

17. A system for enabling communication between a first network device that communicates using a first address format and a second network device that communicates using a second address format, comprising:

means for receiving a frame from the first network device directed toward the second network device;

means for determining whether one address in the second address format is available to communicate with the second network device; and

means for defining a correspondence between the first network device address in the first address format and the determined address in the second address format if one address in the second address format is available, wherein the determined address is used to represent the first network device to the second network device.

18. The system of claim 17, wherein the first network device uses an address of the second network device in the first address format to communicate with the second network device, wherein the received frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively, further comprising:

means for setting the first network device address indicated in the frame to the defined corresponding address in the second address format for the first network device;

means for setting the second network device address indicated in the frame to a second network device address in the second address format; and

means for transmitting the frame including the first and second network device addresses in the second address format to the second network device.

19. The system of claim 18, wherein the means for setting the second network device address to the address in the second address format transforms address bits in the second network device address in the first address format included in the received frame.

20. The system of claim 19, wherein transforming the address bits to the second address format comprises zeroing out bits in the second network device address in the first address format.

21. The system of claim 18, wherein the received frame includes an error redundancy code to check data integrity of the frame, further comprising:

means for recalculating the error redundancy code for the frame including the first and second network device addresses in the second address format; and

means for inserting the recalculated error redundancy code into the frame, wherein the frame including the recalculated error redundancy code is transmitted to the second network device.

22. The system of claim 18, further comprising:

means for receiving a response frame from the second network device in response to the transmitted frame, wherein the response frame identifies the second network device as the source and the first network device as the destination of the response frame, wherein the first and second network device addresses are in the second address format in the response frame;

means for setting the second network device address indicated as the source in the response frame to the registered address of the second network device in the first address format;

means for setting the first network device address indicated as the destination in the response frame to the address in the first address format defined as corresponding to the address in the second address format for the first network device; and

means for transmitting the response frame including the first and second network device addresses in the first address format to the first network device.

23. The system of claim 22, wherein the second network device is a member of a group of network devices that use the second address format to communicate, wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices, and wherein a same set of bits is used in the registered addresses of the network devices that are members of the group of network devices to identify the network devices as members of the group.

24. The system of claim 17, wherein the second network device is a member of a group of network devices that use the second address format to communicate, and wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices.

25. The system of claim 24, wherein correspondences are defined between multiple network device addresses in the first address format and determined multiple network device addresses in the second address format, wherein the determined addresses in the second address format are used to represent the multiple network devices to the group of network devices.

26. The system of claim 25, further comprising:

means for performing an initialization of the group of network devices; and

means for invalidating the defined correspondences of the multiple network device addresses in the first address format to the second address format.

27. The system of claim 25, wherein the group of network devices comprises an arbitrated loop attached to a switch, and wherein the first network device is capable of communicating with one port on the switch.

28. The system of claim 27, wherein the network devices and switch communicate using the Fibre Channel protocol and wherein the arbitrated loop comprises a private arbitrated loop.

29. The system of claim 27, wherein the switch includes a port to which the arbitrated loop is connected, wherein the port registers the addresses of the first and second

network devices, receives the frame from the first network device, determines whether one address in the second address format is available, and defines the correspondence.

30. The system of claim 17, wherein the first network device transmits the frame to discover service parameters from the second network device to enable communication therebetween.

31. The system of claim 30, wherein the network devices communicate using the Fibre Channel protocol and wherein the first network device transmits the frame as part of a Fibre Channel PLOGI operation.

32. The system of claim 17, further comprising:

means for receiving a subsequent frame from the first network device after defining the correspondence of the first network device address in the first address format to one address in the second address format, wherein the subsequent frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively;

means for determining the first network device address in the second address format corresponding to the address in the first address format in the subsequent frame according to the defined correspondence;

means for setting the first network device address indicated in the subsequent frame to the corresponding first network device address in the second address format;

means for setting the second network device address indicated in the subsequent frame to a second network device address in the second address format; and

means for transmitting the subsequent frame including the first and second network device addresses in the second address format to the destination network device.

33. A network system, comprising:

a first network device that communicates using a first address format;

a second network device that communicate using a second address format;

a switch providing a path between the first and second network devices, including:

(i) an address registry including addresses of the first and second network devices in the first address format;

(ii) logic implemented within the switch capable of performing:

(a) receiving a frame from the first network device directed toward the second network device;

(b) determining whether one address in the second address format is available to communicate with the second network device; and

(c) defining a correspondence between the first network device address in the first address format and the determined address in the second address format if one address in the second address format is available, wherein the determined address is used to represent the first network device to the second network device.

34. The network system of claim 33, wherein the received frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively, and wherein the logic implemented in the switch further performs:

setting the first network device address indicated in the frame to the defined corresponding address in the second address format for the first network device;

setting the second network device address indicated in the frame to a second network device address in the second address format; and

transmitting the frame including the first and second network device addresses in the second address format to the second network device.

35. The network system of claim 34, wherein the logic implemented in the switch further performs:

receiving a response frame from the second network device in response to the transmitted frame, wherein the response frame identifies the second network device as the source and the first network device as the destination of the response frame, wherein the first and second network device addresses are in the second address format in the response frame;

setting the second network device address indicated as the source in the response frame to the registered address of the second network device in the first address format;

setting the first network device address indicated as the destination in the response frame to the address in the first address format defined as corresponding to the address in the second address format for the first network device; and

transmitting the response frame including the first and second network device addresses in the first address format to the first network device.

36. The network system of claim 33, further comprising:

a group of network devices, including the second network device, that use the second address format to communicate, and wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices.

37. The network system of claim 36, further comprising:

multiple network devices, including the first network device, that use the first address format to communicate, wherein correspondences are defined between multiple network device addresses in the first address format and determined multiple network device addresses in the second address format, wherein the determined addresses in the second address format are used to represent the multiple network devices to the group of network devices.

38. The network system of claim 36, wherein the group of network devices comprises an arbitrated loop attached to the switch, and wherein the first network device is capable of communicating with one port on the switch.

39. The network system of claim 33, wherein the logic implemented by the switch is embedded in a port card on the switch that is in a path between the first and second network devices.

40. The network system of claim 36, wherein the network devices and switch communicate using the Fibre Channel protocol and wherein the arbitrated loop comprises a private arbitrated loop.

41. An article of manufacture for use in enabling communication between a first network device that communicates using a first address format and a second network device that communicates using a second address format by:

receiving a frame from the first network device directed toward the second network device;

determining whether one address in the second address format is available to communicate with the second network device; and

defining a correspondence between the first network device address in the first address format and the determined address in the second address format if one address in the second address format is available, wherein the determined address is used to represent the first network device to the second network device.

42. The article of manufacture of claim 41, wherein the first network device uses an address of the second network device in the first address format to communicate with the

second network device, wherein the received frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively, further comprising:

setting the first network device address indicated in the frame to the defined corresponding address in the second address format for the first network device;

setting the second network device address indicated in the frame to a second network device address in the second address format; and

transmitting the frame including the first and second network device addresses in the second address format to the second network device.

43. The article of manufacture of claim 42, wherein setting the second network device address to the address in the second address format comprises transforming address bits in the second network device address in the first address format included in the received frame.

44. The article of manufacture of claim 43, wherein the step of transforming the address bits to the second address format comprises zeroing out bits in the second network device address in the first address format.

45. The article of manufacture of claim 42, wherein the received frame includes an error redundancy code to check data integrity of the frame, further comprising:

recalculating the error redundancy code for the frame including the first and second network device addresses in the second address format; and

inserting the recalculated error redundancy code into the frame, wherein the frame including the recalculated error redundancy code is transmitted to the second network device.

46. The article of manufacture of claim 42, further comprising:

receiving a response frame from the second network device in response to the transmitted frame, wherein the response frame identifies the second network device as the source and the first network device as the destination of the response frame, wherein the first and second network device addresses are in the second address format in the response frame;

setting the second network device address indicated as the source in the response frame to the registered address of the second network device in the first address format;

setting the first network device address indicated as the destination in the response frame to the address in the first address format defined as corresponding to the address in the second address format for the first network device; and

transmitting the response frame including the first and second network device addresses in the first address format to the first network device.

47. The article of manufacture of claim 46, wherein the second network device is a member of a group of network devices that use the second address format to communicate, wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices, and wherein a same set of bits is used in the registered addresses of the network devices that are members of the group of network devices to identify the network devices as members of the group.

48. The article of manufacture of claim 41, wherein the second network device is a member of a group of network devices that use the second address format to communicate, and wherein the first network device uses the defined corresponding address in the second address format to communicate with any member of the group of network devices.

49. The article of manufacture of claim 48, wherein correspondences are defined between multiple network device addresses in the first address format and determined multiple network device addresses in the second address format, wherein the determined addresses in the second address format are used to represent the multiple network devices to the group of network devices.

50. The article of manufacture of claim 49, further comprising:

performing an initialization of the group of network devices; and

invalidating the defined correspondences of the multiple network device addresses in the first address format to the second address format.

51. The article of manufacture of claim 49, wherein the group of network devices comprises an arbitrated loop attached to a switch, and wherein the first network device is capable of communicating with one port on the switch.

52. The article of manufacture of claim 51, wherein the network devices and switch communicate using the Fibre Channel protocol and wherein the arbitrated loop comprises a private arbitrated loop.

53. The article of manufacture of claim 51, wherein the switch includes a port to which the arbitrated loop is connected, wherein the port registers the addresses of the first and second network devices, receives the frame from the first network device, determines whether one address in the second address format is available, and defines the correspondence.

54. The article of manufacture of claim 41, wherein the first network device transmits the frame to discover service parameters from the second network device to enable communication therebetween.

55. The article of manufacture of claim 54, wherein the network devices communicate using the Fibre Channel protocol and wherein the first network device transmits the frame as part of a Fibre Channel PLOGI operation.

56. The article of manufacture of claim 41, wherein after defining the correspondence of the first network device address in the first address format to one address in the second address format, performing:

receiving a subsequent frame from the first network device, wherein the subsequent frame indicates the first and second network device addresses in the first address format as the source and destination addresses, respectively;

determining the first network device address in the second address format corresponding to the address in the first address format in the subsequent frame according to the defined correspondence;

setting the first network device address indicated in the subsequent frame to the corresponding first network device address in the second address format;

setting the second network device address indicated in the subsequent frame to a second network device address in the second address format; and

transmitting the subsequent frame including the first and second network device addresses in the second address format to the destination network device.